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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/989,702	11/21/2001	Hayato Kikuchi	108426-00010	9591

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EXAMINER

BOTTORFF, CHRISTOPHER

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 09/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/989,702

Applicant(s)

KIKUCHI ET AL.

Examiner

Christopher Bottorff

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 11-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4. 6) ☐ Other:

DETAILED ACTION

The amendment filed July 10, 2003 was entered. Claims 14-20 are canceled.
Claims 1-13 are pending.

Election/Restrictions

Applicant's election with traverse of the apparatus of Group I, the switch arrangement of species A, and the mode of operation of species 1 in Paper No. 9 is acknowledged. The traversal relates to the election of species requirement and is on the ground(s) that the functionality of the switch arrangements of species A-C is the same and the various modes of species 1-3 can be implemented by the switch arrangements. This is not found persuasive because the functionality and structure of the switch arrangements of species A-C is not the same and the three modes of operation are distinct from each other.

Page 24, lines 24-27, of the specification indicates that the cruise switch of Figure 7(a) allows a direct transition path between the ACC mode and the CC mode, while the switch of Figure 6(a) does not. Although a direct transition path between the ACC mode and the CC mode is possible when the cruise switch of Figure 6(a) is combined with the distance switch of Figure 8(a) as indicated on lines 21-22 of page 26 of the specification, the direct transition path is provided by the distance switch alone and the cruise switch is limited to turning a mode on or off. The specification does not state that the switch of Figure 6(a) could provide a direct transition path between the ACC mode and the CC mode or how the switch of Figure 6(a) could provide this.

The switch of Figure 7(a), however, provides a direct transition path between the ACC mode and the CC mode. The switch of Figure 8(a), when combined with the switch of Figure 7(a), provides an additional mechanism for transitioning between the ACC mode and the CC mode. Thus, the arrangements of species A and B do not function in the same manner.

Moreover, the switch of Figure 6(a) is a toggle type switch, as stated on lines 9-10 of page 23 of the specification, and the switch of Figure 7(a) is a seesaw type switch, as stated on lines 17-18 of page 24 of the specification. Thus, the switches of species A and B are structurally distinct.

The switch of Figure 6(b) consolidates the functions in one switch, rather than utilizing two switches as in species A and B. This consolidated switch arrangement introduces structure and functions that are distinct from the other switch arrangements. Although the various switch arrangements can activate all of the modes, the manner in which each switch initiates the transition between the modes is distinct.

In regard to the modes of operation of species 1-3, Applicants acknowledge on lines 15-18 of page 8 of the remarks to the election that each mode of species 1-3 includes different steps. These different steps establish the distinct nature of each mode.

The requirement is still deemed proper and is therefore made FINAL.

As currently presented, claims 1-13 are generic to the various species of switch arrangements, but only claims 1-10 relate to the mode of operation of species 1. Thus, the elected embodiment of the auto-cruise apparatus, which includes the switch

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arrangement of the switch of Figure 6(a) combined with the switch of Figure 8(a) performing the mode of species 1, relates to claims 1-10. Claims 11-13 have been withdrawn from consideration as being directed to non-elected species.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on April 25, 2002 was considered by the examiner.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided.

Claim Objections

Claim 6 is objected to because of the following informalities: the term "is" after "said non control state" on line 2 is unclear and appears to be a misspelling of the term "if". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 10, as it depends from claims 7 and 8, is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10 recites the limitation "is set to middle" in line 8. There is insufficient antecedent basis for this limitation in the claim when the claim depends from claims 7 and 8.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3 as it depends from claim 1, 4 as it depends from claim 3 when claim 3 depends from claim 1, 5 as it depends from claim 1, 6 as it depends from claim 5

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when claim 5 depends from claim 1, 7, and 10 as it depends from claim 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Kakinami et al. US 5,230,400.

Kakinami et al. discloses an auto-cruise apparatus having a vehicle to vehicle distance controller within CPU 3, input means SW4-SW7 that enable a driver to set a vehicle to vehicle distance and a vehicle speed, a constant vehicle speed controller within CPU 3, and a mode selector within CPU 3. The input means includes a cruise switch SW 6 and a vehicle to vehicle distance setting means SW 7 for setting the set vehicle to vehicle distance. Furthermore, this apparatus functions as claimed. See column 5, lines 3-5 and 65-68, column 6, lines 1-68, column 7, lines 1-8 and 55-68, and column 8, lines 1-64.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3 as it depends from claim 2, 4 as it depends from claim 3 when claim 3 depends from claim 2, 5 as it depends from claim 2, 6 as it depends from claim 5 when claim 5 depends from claim 2, 8, and 10 as it depends from claim 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kakinami et al. US 5,230,400 in view of Nishimura US 5,695,020.

Kakinami et al. discloses the apparatus as described above, but does not disclose that the apparatus operates as a function of the operating time of the input means as defined in claims 2 and 8. However, Nishimura teaches that the practice of controlling the operation of an auto-cruise apparatus as a function of the operating time of the input means was old and well known in the art at the time the invention was made. See column 7, lines 38-62, and column 8, lines 39-46. From the teachings of Nishimura, operating the system of Kakinami et al. as a function of the operating time of the input means would have been obvious to one of ordinary skill in the art at the time the invention was made. This would allow a switch input means to perform multiple functions without the need for additional switches.

Allowable Subject Matter

Claims 9 and 10 as it depends from 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 9 states that the vehicle to vehicle distance setting means is capable of setting the vehicle to vehicle distance to at least a long, middle, or short distance. The prior art does not teach a vehicle to vehicle distance setting means that is capable of doing this.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hibino et al., Labuhn et al., Kajiwara, Nishimura et al., Heymann

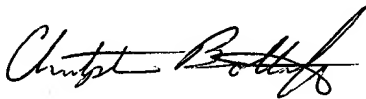
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et al., Arai et al., Desens et al., Nakamura et al., King et al., Teramura et al., Kinoshita et al., Seto et al., Ishizu et al., and Kuroda et al. disclose vehicle cruise control systems.

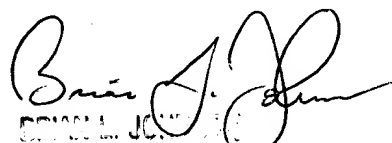
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Bottorff whose telephone number is (703) 308-2183. The examiner can normally be reached on Mon.-Fri. 7:30 a.m. - 4:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Johnson can be reached on (703) 308-0885. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.



Christopher Bottorff


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9/15/03